



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,836	01/25/2006	Noriki Fukunishi	19078-003US1 F05-053US	7651
26211 7590 01/23/2008 FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER MUROMOTO JR, ROBERT H	
			ART UNIT 3765	PAPER NUMBER
			MAIL DATE 01/23/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/565,836	<b>Applicant(s)</b> FUKUNISHI ET AL.	
	<b>Examiner</b> Robert H. Muromoto, Jr.	<b>Art Unit</b> 3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-16 is/are rejected.
- 7) ☒ Claim(s) 17-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/27/2007</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

Claims 17-20 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Instantly listed claims are process claims that improperly depend on a product claim.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *New type sportswear fabrics "Zebra" from Toyobo and Itochu*, JTN Monthly, December 1, 2000 (Zebra herein) in view of instant Background of Invention.

Zebra teaches a fabric that exhibits the concept of "lighter, stronger, and more beautiful fabric a perennial goal for fabrics since the days when silk was riding high."

Zebra uses two yarns one a 30 denier (33 dtex) high multifilament textured yarn for the warp and a 37 denier (41 dtex) superhigh multifilament yarn; .2 denier (.3 dtex) per filament for the weft.

The major current (as of publication date 2000) fabrics are taffeta and ripstop densely weaving the yarns above. The warp density being 200yarns per inch and the weft density being 150 wefts per inch (warp to weft ratio 1.2).

The weight is ultra-light 56 grams per square meter for taffeta and 60grams per square meter for ripstop.

Tearing strength is 1900 g (18.6 N) in the warp and 1000g (9.8N) in the weft.

Zebra teaches 'despite being fine denier and high density fabrics, they maintain sufficient tearing strength because of a new way of finishing.'

Zebra teaches the fabric having air permeability of .6 cc/square cm/sec, giving the fabric 'downproofing' properties.

As for touch, Zebra offers adequate body, softness and a very light hand because of directly spun super high multifilament yarns

Zebra specifically teaches the claimed tear strength, air permeability, warp and weft density/ratio, and individual fiber fineness ranges as recited by instant claims.

The basis weight and yarn linear density taught by Zebra are only slightly different than those recited in the claims. Since the Zebra fabric is taught as one exhibiting "lighter, stronger and more beautiful fabrics" it is considered an obvious variation to the Zebra fabric to produce a fabric with the slight variation in weight and yarn linear density claimed.

Recited 'bending rigidity', fabric thickness, and lip width (ripstop design width) and cover factor are all fabric properties that are directly related to the fabric properties taught above in Zebra.

Since all structure and most material properties are taught by Zebra it follows that the fabric's bending rigidity, fabric thickness, lip width, and cover factor as recited in the claims are inherently present in the Zebra fabric.

Although Zebra teaches essentially all of the claimed limitations of the instant fabric, Zebra does not specifically recite the use of polyamide yarns in the production of the fabric.

However, the instant Background of Invention section admits that polyester multifilament (as in Zebra), nylon multifilament (polyamide) and composites thereof have been used commonly in sportswear having so-called 'downproofing' properties due to the intrinsic excellent mechanical properties of polyester and/or nylon.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the Zebra fabric to use polyamide yarns rather than polyester yarns to produce a 'lighter, stronger, more beautiful fabric' that still retains appropriate strength to be used in sportswear applications that require a so-called 'downproofing' property.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-8 and 11-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H. Muromoto, Jr. whose telephone number is 571-272-4991. The examiner can normally be reached on 8-530, M-F.

Application/Control Number:  
10/565,836  
Art Unit: 3765

Page 5

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bobby Muromoto  
/Bobby Muromoto/  
Patent examiner  
Art unit 3765  
January 16, 2008